```
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
       JP 2005502326
                                   T2
                                            20050127
                                                            JP 2002-592342
                                                                                            20020327
       US 2006115490
                                    A1
                                            20060601
                                                            US 2004-471571
                                                                                            20041020
PRIORITY APPLN. INFO.:
                                                            GB 2001-7661
                                                                                        A 20010327
                                                            WO 2002-IB2637
                                                                                        W 20020327
ED
       Entered STN: 29 Nov 2002
AB
       The invention provides 2821 nucleic acid coding sequences from
       Staphylococcus aureus strain NCTC 8325 along with their inferred
       translation products. The proteins are useful for vaccines, immunogenic
       compns., diagnostics, enzymic studies, and also as targets for
       antibiotics.
IT
       476558-05-1 476571-96-7 476578-60-6
       RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
       (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
           (amino acid sequence; Staphylococcus aureus proteins and nucleic acids
           and their diagnostic and therapeutic uses for staphylococcal
           infections)
L20 ANSWER 27 OF 43
                              CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                                  2002:781494 CAPLUS
DOCUMENT NUMBER:
                                  138:12031
TITLE:
                                  Essential genes in microorganisms and their use as
                                  targets for antisense inhibition of proliferation and
                                  antibiotic screening
                                  Wang, Liangus; Zamudio, Carlos; Malone, Cheryl;
INVENTOR(S):
                                  Haselbeck, Robert; Ohlsen, Kari L.; Zyskind, Judith W.; Wall, Daniel; Trawick, John D.; Carr, Grant J.; Yamamoto, Robert; Forsyth, R. Allyn; Xu, H. Howard
PATENT ASSIGNEE(S):
                                  Elitra Pharmaceuticals, Inc., USA
SOURCE:
                                  PCT Int. Appl., 1766 pp.
                                  CODEN: PIXXD2
DOCUMENT TYPE:
                                  Patent
LANGUAGE:
                                  English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
       PATENT NO.
                                  KIND
                                           DATE
                                                           APPLICATION NO.
                                                                                          DATE
         -----
                                  ----
                                                            -----
       WO 2002077183
           2002077183

A2 20021003 WO 2002-XQ9107

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                   A2
                                           20021003
                                                          WO 2002-XO9107
                                                                                           20020321
       US 2002061569
                                  A1
                                           20020523
                                                        US 2001-815242
                                                                                           20010321
       WO 2002077183
                                  Α2
                                           20021003
                                                          WO 2002-US9107
                                                                                           20020321
```

US 2001-948993 20010906 US 2001-342923P ₽ 20011025 US 2002-72851 Α 20020208 US 2002-362699P Ρ 20020306 WO 2002-US9107 Α 20020321 US 2000-191078P Ρ 20000321 US 2000-206848P Р 20000523 US 2000-207727P Ρ 20000526 US 2000-242578P Ρ 20001023 US 2000-253625P Ρ 20001127 US 2000-257931P Ρ 20001222 US 2001-269308P Р 20010216

ED Entered STN: 14 Oct 2002

AB The sequences of antisense nucleic acids which inhibit the proliferation of prokaryotes are disclosed. Thus, 6213 nucleic acid fragments are identified for which expression inhibits proliferation or is required for proliferation in Enterococcus faecalis, Escherichia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, and Staphylococcus aureus. Cell-based assays which employ the antisense nucleic acids to identify and develop antibiotics are also disclosed. antisense nucleic acids can also be used to identify proteins required for proliferation, express these proteins or portions thereof, obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate mols. for rational drug discovery programs. The nucleic acids can also be used to screen for homologous nucleic acids that are required for proliferation in cells other than Staphylococcus aureus, Salmonella typhimurium, Klebsiella pneumoniae, and Pseudomonas aeruginosa. The invention provides 38,184 such proliferation-required gene sequences (plus their encoded protein sequences). The nucleic acids of the present invention can also be used in various assay systems to screen for proliferation required genes in other organisms. [This abstract record is one of twenty records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

477394-36-8 477395-07-6 477416-07-2

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence; essential genes in microorganisms and their use as targets for antisense inhibition of proliferation and antibiotic screening)

L20 ANSWER 28 OF 43 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:781493 CAPLUS

DOCUMENT NUMBER: TITLE:

138:1097

Essential genes in microorganisms and their use as targets for antisense inhibition of proliferation and

antibiotic screening

INVENTOR(S):

Wang, Liangus; Zamudio, Carlos; Malone, Cheryl; Haselbeck, Robert; Ohlsen, Kari L.; Zyskind, Judith W.; Wall, Daniel; Trawick, John D.; Carr, Grant J.; Yamamoto, Robert; Forsyth, R. Allyn; Xu, H. Howard

PATENT ASSIGNEE(S):

Elitra Pharmaceuticals, Inc., USA

SOURCE:

PCT Int. Appl., 1766 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

22

PATENT INFORMATION:

INDEX NAME)

OTHER NAMES:

CN 335: PN: WO02077183 SEQID: 66335 claimed protein

SQL 2468

RN 477134-44-4 REGISTRY

SEQ 2101 NILTISAEPG TELTVTVDVG GVTATATVTA DNSGLASLNL LTDLDIDFSW

HITS AT: 2123-2128

RELATED SEQUENCES AVAILABLE WITH SEQLINK

£21 ANSWER 46 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

CN Protein (Neisseria meningitidis clone NME301662 essential) (9CI) (CA INDEX NAME)

======

OTHER NAMES:

CN 121: PN: WO02077183 SEQID: 66121 claimed protein

SQL 2514

RN 477132-31-3 REGISTRY

SEQ 501 TPTTATGTGT ATVSISNITA PTFADGTIRT HGALDNSGSI IANGQTDVSA

HITS AT: 508-513

RELATED SEQUENCES AVAILABLE WITH SEQLINK

L21 ANSWER 47 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

OTHER NAMES:

CN 3570: PN: WO02077183 SEQID: 65570 claimed protein

SQL 1491

RN 477127-03-0 REGISTRY

SEQ 501 TPTTATGTGT ATVSISNITA PTFADGTIRT HGALDNSGSI IANGQTDVSA

=== === HITS AT: 508-513

L21 ANSWER 48 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

CN Protein (Mycobacterium tuberculosis clone MTU203377 essential) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2876: PN: WO02077183 SEQID: 64876 claimed protein

SQL 408

RN 477120-68-6 REGISTRY

=====

SEQ 151 TATVTVKVDT GLNRNGVGPA QFPAMLTALR QAMAEDAVRL RGLMSHMVYA

HITS AT: 151-156

RELATED SEQUENCES AVAILABLE WITH SEOLINK

L21 ANSWER 49 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

CN Protein (Mycobacterium leprae clone MLP100239 essential) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1695: PN: WO02077183 SEQID: 63695 claimed protein

SQL 388

RN 477111-51-6 REGISTRY

```
SEQ 101 ALLADVQIAV SSVRQLDELL DAVRRTGRTA TVTVKADTGL NRNGVVTDQY
```

HITS AT: 129-134

RELATED SEQUENCES AVAILABLE WITH SEQLINK

L21 ANSWER 50 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

CN Protein (Mycobacterium bovis clone MBV101134 essential) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 413: PN: WO02077183 SEQID: 62413 claimed protein

SQL 370

RN 477098-69-4 REGISTRY

SEQ 101 DELLHAVRRT GRTATVTVKV DTGLNRNGVG PAQFPAMLTA LRQAMAEDAV

HITS AT: 113-118

L21 ANSWER 51 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

CN Protein (Mycobacterium avium clone MAV105645 essential) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 147: PN: WO02077183 SEQID: 62147 claimed protein

SQL 391

RN 477096-03-0 REGISTRY

SEQ 101 FRPALLAGVQ IGLSSQRQLD ELLTAVRDTG RTATVTVKVD TGLNRNGVPP

HITS AT: 132-137

RELATED SEQUENCES AVAILABLE WITH SEQLINK

L21 ANSWER 52 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

CN Protein (Klebsiella pneumoniae clone KPN303893 essential) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1979: PN: WO02077183 SEQID: 59979 claimed protein

SQL 1048

RN 477074-36-5 REGISTRY

SEQ 51 GADAETVQNT VTQVIEQNMN GIDHLMYMSS NGDSTGTATI TLTFESGTDP

HITS AT: 85-90

L21 ANSWER 53 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

CN Protein (Enterococcus faecium clone EFM200383 essential) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3618: PN: WO02077183 SEQID: 57618 claimed protein

SQL 590

RN 477050-99-0 REGISTRY

SEQ 151 LQMANQLDQL PNRPVIVALT ATATVQVAAD IKRLLKIPEN NHIQTGFERE

. = ===

HITS AT: 170-175

L21 ANSWER 54 OF 73 REGISTRY COPYRIGHT 2006 ACS on STN

CN Protein (Corynebacterium diphtheriae clone CDP100137 essential) (9CI) (CA INDEX NAME)

OTHER NAMES: